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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,890	12/09/2003	Ronald Glas	GS 0647 A	4671

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EXAMINER	
PILKINGTON, JAMES	
ART UNIT	**PAPER NUMBER**
3682	

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/731,890	GLAS ET AL.	
	Examiner	Art Unit	
	James Pilkington	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedmann, USP 6,435,994 B1, in view of Cote et al, USP 6,356,848 B1.

Re clm 1, Friedmann discloses a continuously variable transmission (100) that includes:

- two conical pulley pairs (101 and 102)
- spaced parallel axes (C15/L14-35)
- an endless torque-transmitting means (103)

Friedmann does not disclose a sensor for detecting the speed of the endless torque-transmitting means.

Cote teaches a sensor (22) positioned opposite to and facing the endless torque-transmitting means for detecting the speed of the endless torque-transmitting means (18) for the purpose of measuring the speed of the chain as it passes the sensor (C5/L16-17).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Friedmann and provide a sensor positioned opposite to and facing the endless torque transmitting means for detecting the speed of

the endless torque-transmitting means as it passes the sensor, as taught by Cote, for the purpose of measuring the speed of the chain.

Re clm 2, Friedman discloses a linear guide bar (see Figure 5) for guiding a slack linear strand of the endless torque-transmitting means (103).

Friedmann does not disclose a sensor carried on a guide bar that guides a slack strand of the endless torque-transmitting means and that can pivot about an axis that is parallel to the axes of conical pulley pairs.

Cote discloses the sensor (22) is carried on a guide bar (19) that guides a slack strand of the endless torque-transmitting means (18) and that can pivot about an axis that is parallel to the axes of the conical pulley pairs (at 51).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Friedmann and provide a sensor that is carried on a linear guide bar that guides a slack linear strand of the endless torque-transmitting means and that can pivot about an axis that is parallel to the axes of the conical pulley pairs, as taught by Cote, for the purpose of allowing the chain to move to vary the transmission ratio (C4/L44-50).

Re clm 3, Friedmann discloses the guide bar (104) is carried on a fixed support (114) positioned between the conical pulley pairs.

Re clm 4, Friedmann discloses the torque-transmitting means (103) is a plate link chain (Figure 1) that includes pins (Figure 1) that interconnect adjacent chain links.

Friedmann does not disclose that the sensor detects pins as they pass the sensor.

Cote teaches that the sensor (22) detects pins (raised magnetic members 29a-e) as they pass the sensor (22) for the purpose of measuring the speed of the chain (C5/L16-17).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Friedmann and take the magnetic members (29a-e) of Cote and install them on the chain link (103) of Friedmann for the purpose of measuring the speed of the chain.

Re clm 5, Cote discloses that the sensor (22) is a proximity sensor (C5/L48)

Re clm 6, Cote discloses the sensor (22) is connected to a control unit (110) in which data is stored and determines the speed (C9-10).

Re clm 7 and 8, Cote that the number of magnets and the distance apart is stored in the control unit (110) (C5-10).

Re clm 9, Friedmann discloses that the fixed support (114) is a tubular member (C16/L20-21). The examiner notes that an oil pipe is a tubular member based on the definition of the word pipe in Merriam-Webster's Collegiate Dictionary (10^{th} ed.). Merriam-Webster defines a pipe as a "tubular or cylindrical object, part or passage."

Re clm 10, Friedmann discloses the guide bar (104) is displaceable in a direction that is substantially perpendicular to the movement direction of the endless torque-transmitting means (103) (see Figure 3).

Re clm 11, Friedmann discloses the pivot axis (114) of the guide bar (104) is positioned between the pulley axes and is within a loop defined by the endless torque-transmitting means (103) (see Figure 2).

Re clm 12, Friedmann discloses the end faces of the pins are in frictional engagement with the conical surfaces of the conical disks (pulleys 101 and 102).

Response to Arguments

Applicant's arguments filed August 10, 2006 have been fully considered but they are not persuasive.

3. The applicant argues that the Cote et al reference does not relate to a continuously variable transmission having the structure as claimed.

The examiner agrees with the applicant Cote et al does not disclose the structure of the CVT system. The examiner directs the applicant to the office action above where the Friedmann et al reference is being used to disclose the structure of the CVT system.

4. The applicant argues that the Cote et al reference does not disclose or even suggest an arrangement whereby the linear speed of an endless torque-transmitting means is detected.

The examiner directs the applicant to the column 5 lines 16-17 in the Cote et al reference where it states "the speed sensor measures the speed of the chain."

5. The applicant argues that the Cote and Friedmann references do not disclose that the sensor is positioned opposite to and facing the endless torque-transmitting means and interacts with the chain.

The examiner asserts that the Cote reference does indeed disclose that the sensor is positioned opposite to and facing the endless torque-transmitting means (the chain interacts with the sprocket wheel which the sensor is positioned opposite to and facing the chain) and detects the speed as it passes the sensor (the chain passes around the sensor). The examiner would also like to note that the features upon which applicant relies (i.e., "interacts with the chain") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The rejected claim states that "wherein the sensor is located at a position *relative to the path of movement* of the endless torque-transmitting means."

6. In response to applicant's argument that the Cote et al reference is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor **or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned**, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Cote et al reference relates to the particular problem since the reference discloses a sensor for detecting the speed of an endless torque-transmitting means.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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8/14/2006

RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER